

For Research Use Only

ALKBH3 Recombinant antibody, PBS Only (Capture)

Catalog Number: 84314-2-PBS



Basic Information

Catalog Number: 84314-2-PBS	GenBank Accession Number: BC015155	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 221120	CloneNo.: 241650F10
Source: Rabbit	UNIPROT ID: Q96Q83	
Isotype: IgG	Full Name: alkB, alkylation repair homolog 3 (E. coli)	
Immunogen Catalog Number: AG2982	Calculated MW: 286 aa, 33 kDa	
	Observed MW: 30-33 kDa	

Applications

Tested Applications:
WB, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

84314-2-PBS targets ALKBH3 as part of a matched antibody pair.

MP01211-1: 84314-2-PBS capture and 84314-1-PBS detection (validated in Cytometric bead array)

MP01211-2: 84314-2-PBS capture and 84314-4-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

ALKBH3, also named as ABH3 and DEPC-1, is a dioxygenase that mediates demethylation of DNA and RNA containing 1-methyladenosine (m1A). It has a strong preference for single-stranded. ALKBH3 requires molecular oxygen, alpha-ketoglutarate and iron. This gene has some isoforms with MW 19-25 kDa and 33 kDa.

Storage

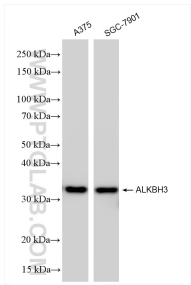
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

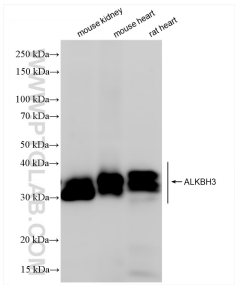
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

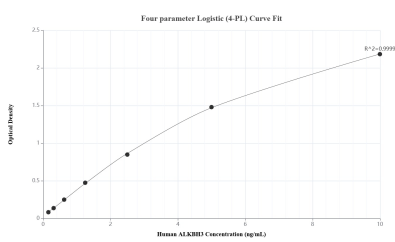
Selected Validation Data



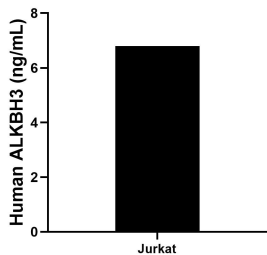
Various lysates were subjected to SDS PAGE followed by western blot with 84314-2-RR (ALKBH3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.



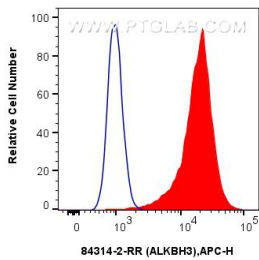
Various lysates were subjected to SDS PAGE followed by western blot with 84314-2-RR (ALKBH3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.



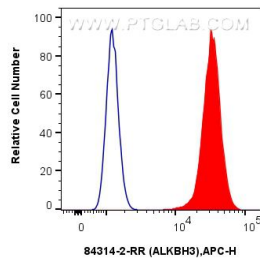
Sandwich ELISA standard curve of MP01211-2, Human ALKBH3 Recombinant Matched Antibody Pair - PBS only. 84314-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2982. 84314-4-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL.



The mean ALKBH3 concentration was determined to be 6.80 ng/mL in Jurkat cell extract based on a 1.50 mg/mL extract load.

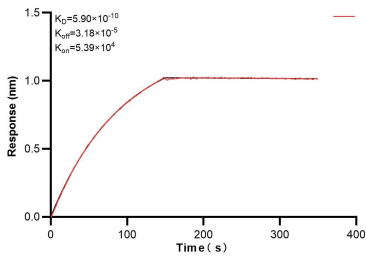


1x10⁶ HeLa cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-2-RR, Clone:241650F10) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.

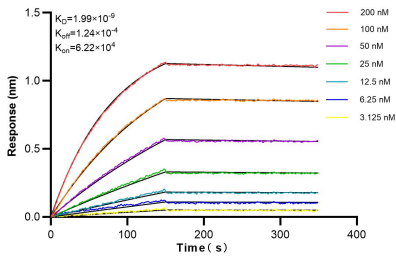


1x10⁶ PC-3 cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-2-RR, Clone:241650F10) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.

Cytometric bead array standard curve of MP01211-1, ALKBH3 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84314-2-PBS. Detection antibody: 84314-1-PBS. Standard: Ag2982. Range: 0.781-100 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 84314-2-PBS against Human ALKBH3 was performed. The affinity constant is 0.59 nM.



Biolayer interferometry (BLI) kinetic assays of 84314-2-RR against Human ALKBH3 were performed. The affinity constant is 1.99 nM.